

WHAT IS CLAIMED IS:

1. A speed cooking oven comprising:

a cooking cavity;

a microwave cooking unit for delivering microwave energy into said cooking cavity;

5 a plurality of radiant lamps for delivering radiant energy into said cooking cavity; and

a control panel operatively connected to said microwave cooking unit and said plurality of radiant lamps for user manipulation of oven feature inputs including an OVEN LIGHT input; and

10 a microcomputer coupled to said control panel, said microcomputer programmed to energize one of said plurality of radiant cooking lamps for a predetermined time to illuminate said cooking cavity.

2. A speed cooking oven in accordance with Claim 1 wherein said predetermined time is about 4 seconds.

15 3. A speed cooking oven in accordance with Claim 1 wherein said microcomputer is further programmed to execute a soft start algorithm when energizing said radiant lamp.

4. A speed cooking oven in accordance with Claim 3 wherein said microcomputer is further programmed to limit a number of energizations of said one of said radiant cooking lamps during a predetermined time period.

20 5. A speed cooking oven in accordance with Claim 4 wherein said number of energizations limit is five energizations.

6. A speed cooking oven in accordance with Claim 4 wherein said predetermined time period to limit said number of energizations is approximately two minutes.

7. A speed cooking oven in accordance with Claim 1 wherein said oven
5 comprises an upper radiant cooking unit comprising at least one of said plurality of
lamps radiant cooking lamp and a lower radiant cooking unit comprising at least one of
said plurality of radiant lamps, said radiant upper cooking unit lamp energized to
illuminate said cavity.

8. A speed cooking oven in accordance with Claim 7 wherein said at
10 least one of said plurality of radiant lamps of said upper cooking unit comprises an
upper center lamp and an upper exterior lamp, said upper center lamp of said upper
cooking unit energized by said microprocessor to illuminate said cooking cavity.

9. A speed cooking oven in accordance with Claim 7 wherein said cooking cavity comprises a bottom surface, said at least one of said plurality of radiant lamps of said lower cooking unit mounted at an angle relative to said bottom surface.

10. A speed cooking oven in accordance with Claim 1 wherein said radiant lamps comprise halogen lamps with about 20% to about 50% of out power in a light wave range less than 1.0 μm .

11. A speed cooking oven in accordance with Claim 1 wherein said
20 radiant lamps are electrically coupled to electronic switching devices for soft start
operation.

12. A method for illuminating a combination oven including a cooking cavity, a microwave cooking unit for delivering microwave energy to the cooking cavity, at least one radiant cooking lamp for delivering radiant energy to the cooking cavity, and a control panel operatively connected to the microwave and the at least one radiant cooking lamp, the control panel including an OVEN LIGHT input switch, said method comprising the steps of:

energizing one of the radiant lamps when the OVEN LIGHT input switch is actuated by a user, thereby illuminating the oven cavity;

maintaining energization of the energized radiant lamp for a predetermined period of time; and

5 de-energizing the energized radiant lamp when the predetermined time has elapsed.

13. A method in accordance with Claim 12 wherein said step of maintaining energization comprises the step of maintaining energization for approximately four seconds.

10 14. A method in accordance with Claim 12 wherein said step of energizing one of the radiant lamps comprises the step of executing a soft start algorithm.

15 15. A method in accordance with Claim 12 wherein said method further comprises the step of limiting a number of energizations of the energized radiant lamp during a predetermined time period.

16. A method in accordance with Claim 15 wherein said step of limiting the number of energizations comprises the step of limiting the number of energizations to five.

20 17. A method in accordance with Claim 15 wherein said step of limiting the number of energizations comprises the step of limiting the number of energizations during an approximately two minute period.

18. A method in accordance with Claim 12 wherein the control panel further comprises a display, said method further comprising the step of displaying a message on the display upon each actuation of the oven light switch.

25 19. A speed cooking oven comprising:

a microcomputer;

a shell comprising a cooking cavity;

a radiant cooking unit comprising at least one radiant cooking lamp for delivering radiant energy into said cooking cavity, said radiant cooking unit operatively connected to said micro computer;

a microwave cooking unit for delivering microwave energy into said cooking cavity and operatively connected to said microcomputer;

a control panel mounted to the shell and operatively connected to the microcomputer for user manipulation of an OVEN LIGHT switch;

a door mounted to the shell for closing said cooking cavity, said door comprising a tinted window to shield a user from intense light inside said cooking cavity during oven operation;

said microcomputer programmed to operate said oven in a microwave only cooking mode, a radiant only cooking mode, and a speed cooking mode for a cooking time in accordance with user input to said control panel; and

said microcomputer programmed to energize said radiant cooking lamp upon user actuation of said OVEN LIGHT switch for a predetermined time when said oven is operated in said microwave only mode, thereby illuminating said cooking cavity and enabling visualization of food through said window.

20. A speed cooking oven in accordance with Claim 19 wherein said microcomputer is further programmed to limit a number of energizations of said radiant cooking lamp for illumination purposes to a selected number of energizations over a predetermined period of time.